

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Madhav Datta et al

Dated:

Serial No.

Filed:

For: METHOD FOR TESTING CHIPS ON FLAT SOLDER BUMPS

Docket No.: YO998-431/433 (64,610-042)

**APPOINTMENT OF ASSOCIATE ATTORNEY**

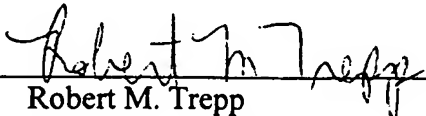
Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The undersigned attorney, who has been appointed as an attorney in the Combined Declaration and Power of Attorney for the above-identified application, hereby appoints **RANDY W. TUNG (Registration No. 31,311) of TUNG & ASSOCIATES, 838 W. Long Lake Road, Suite 120, Bloomfield Hills, Michigan 48302, (Telephone: (248) 540-4040)** his associate attorney to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith.

Please direct all official communications to Randy W. Tung at the address cited above.

Respectfully submitted,  
Attorney for the Applicant(s)

By:   
Robert M. Trepp  
Registration No. 25,933  
Telephone: (914) 945-3147

IBM Corporation  
Intellectual Property Law Department  
P. O. Box 218  
Yorktown Heights, New York 10598  
IBM Docket No.: YO-998-431/433

YO998-431/433  
(64,610-042)

**DECLARATION FOR PATENT APPLICATION**

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled "METHOD FOR TESTING CHIPS ON FLAT SOLDER BUMPS" the specification of which

  X   is attached hereto.

           was filed on                      as  
Application Serial No.                       
And was amended on                       
(If applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendments referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56, a copy of which is attached.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application(s) for patent on inventor's certificate having a filing date before that of the application on which priority is claimed:

**Prior Foreign Application(s)**

**Priority Claimed**

Number	Country	Day/Month/Year	(Yes)	(No)
Number	Country	Day/Month/Year	(Yes)	(No)
Number	Country	Day/Month/Year	(Yes)	(No)

**YO998-431/433**  
**(64,610-042)**

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application Ser. No.	Filing Date	Status
Application Ser. No.	Filing Date	Status

I further declare that I do not know and do not believe that the invention claimed in this application was ever known or used by others in this country before my invention thereof, or patented or described in any printed publication in any country before my invention thereof, or more than one year prior to this application or any prior U.S. application above identified in which said invention may have been disclosed, or in public use or on sale in the United States of America for more than one year prior to this application or any prior U.S. application above identified in which said invention may have been disclosed.

**POWER OF ATTORNEY**

As a named inventor I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith (list name and registration number):

Manny W. Schechter 31,722; Terry J. Ilardi 29,936; Christopher A. Hughes 26,914; Edward A. Pennington 32,588; John E. Hoel 26,279; Joseph C. Redmond, Jr. 18,753; Kevin M. Jordan 40,277; Stephen C. Kaufman 29,551; Jay P. Sbröllini 36,266; David M. Shofi 39,835; Robert M. Trepp 25,933; Louis P. Herzberg 41,500; Daniel P. Morris 32,053; Douglas W. Cameron 31,596 and Paul J. Otterstedt 37,411.

Please send all correspondence and direct telephone calls concerning this application to the following address:

**Randy W. Tung, Reg. No. 31,311**  
**TUNG & ASSOCIATES**  
838 W. Long Lake Road  
Suite 120  
Bloomfield Hills, Michigan 48302  
Phone: (248) 540-4040  
Fax: (248) 540-4035

YO998-431/433  
(64,610-042)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application and of any patent issued thereon.

Full name of first joint inventor

Madhav		Datta
First	Middle	Last

Inventor's Signature

*Madhav Datta*

Date

*3/22/99*

Residence

*816 Wildwood Court, Yorktown Hts, NY 1  
Westchester County*

Citizenship

*Indian*

Post Office Address

*(Same)*

Full name of second joint inventor

Peter	A.	Gruber
First	Middle	Last

Inventor's Signature

*Pete A. Gruber*

Date

*3/22/99*

Residence

*5D Kings Ct. Mohegan Lake, NY 10547*

Citizenship

*USA*

Post Office Address

*(Same)*

YO998-431/433  
(64,610-042)

Full name of third joint inventor      Judith      M.      Rubino  
First      Middle      Last  
Inventor's Signature      *Judith M. Rubino*  
Date      *April 5, 1999*  
Residence      *11 Waterview Drive, Ossining N.Y. 10586*  
Citizenship      *USA*  
Post Office Address      *Same as above*

Full name of fourth joint inventor      Carlos      J.      Sambucetti  
First      Middle      Last  
Inventor's Signature      *Carlos J. Sambucetti*  
Date      *April 5 1999*  
Residence      *4 Sassi Drive, Croton Hudson N.Y. USA*  
Citizenship      *USA*  
Post Office Address      *Same as above*

YO998-431/433  
(64,610-042)

Full name of fifth joint inventor

George	F.	Walker
First	Middle	Last

Inventor's Signature

*George F Walker*

Date

*April 5, 1999*

Residence

*1540 York Ave Apt # 11K New York N.Y. 10028*

Citizenship

*USA*

Post Office Address

*SAME AS ABOVE.*

Full name of sixth joint inventor

First	Middle	Last
-------	--------	------

Inventor's Signature

Date

Residence

Citizenship

Post Office Address

**§1.56 Duty to disclose information material to patentability**

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application; and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

- (2) It refutes, or is inconsistent with, a position the applicant takes in:

- (i) Opposing an argument of unpatentability relied on by the Office, or
  - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent or inventor.

(35 U.S.C. 6, Pub. L. 97-247)

[42 FR 5593, Jan. 28, 1977, as amended at 47 FR 21751, May 19, 1982; 48 FR 2710, Jan. 20, 1983; 49 FR 554, Jan. 4, 1984; 50 FR 5171, Feb. 6, 1985; 53 FR 47808, Nov. 28, 1988, effective Jan. 1, 1989; 57 FR 2034, January 17, 1992, effective March 6, 1992]



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

OCTOBER 08, 1999

PTAS

TUNG & ASSOCIATES  
RANDY W. TUNG  
838 W. LONG LAKE ROAD  
SUITE 120  
BLOOMFIELD HILLS, MICHIGAN 48302



\*101114045A\*

**UNITED STATES PATENT AND TRADEMARK OFFICE**  
**NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/29/1999

REEL/FRAME: 010150/0631  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

DATTA, MADHEV

DOC DATE: 04/12/1999

ASSIGNOR:

GRUBER, PETER A.

DOC DATE: 04/12/1999

ASSIGNOR:

RUBINO, JUDITH M.

DOC DATE: 04/05/1999

ASSIGNOR:

SAMBUCETTI, CARLOS J.

DOC DATE: 04/05/1999

ASSIGNOR:

WALKER, GEORGE F.

DOC DATE: 04/05/1999

ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES  
CORPORATION  
ARMONK, NEW YORK 10504



010150/0631 PAGE 2

SERIAL NUMBER: 09301889  
PATENT NUMBER:

FILING DATE: 04/29/1999  
ISSUE DATE:

PEARLENE FOSTER, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

PTO-1595

RECORDATION FORM COVER SHEET U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
**PATENTS ONLY**To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy  09/30/99 04/29/991 Name of conveying party(ies):  
MADHEV DATTA, PETER A. GRUBER, JUDITH M.  
RUBINO, CARLOS J. SAMBUCETTI AND GEORGE F.  
WALKER2 Name and address of receiving party(ies):  
International Business Machines Corporation  
Armonk, New York 10504Execution Date: March 22, 1999 and April 5, 1999Additional name(s) & address(es) attached ☐ Yes ☒ No

4 Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 04-12-99

A. Patent Application No(s).

B. Patent No(s)

Additional numbers attached? ☐ Yes ☒ No5 Name and address of party to whom correspondence  
concerning document should be mailed:RANDY W. TUNG  
Tung & Associates  
838 W. Long Lake Road  
Suite 120  
Bloomfield Hills, Michigan 483026 Total number of applications and patents involved:  
1

7 Total fee (37 CFR 3.41) \$40.00

☒ Enclosed☐ Authorized to be charged to deposit account

8 Deposit Account Number:

(Attach duplicate copy of this page if paying by deposit  
account)

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9 Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of  
the original document.*Randy W. Tung  
Name of Person Signing  
Registration No 31,311  
Signature04-29-99  
DateTotal number of pages including cover sheet, attachments, and document: 3Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

**ASSIGNMENT**

Whereas, we

Inventor  
and City

(1) Madhev Datta  
County of Westchester

Of Yorktown Heights,  
and State of New York

(2) Peter A. Gruber  
County of Westchester

Of Mohegan Lake  
and State of New York

(3) Judith M. Roldan Rubino  
County of Westchester

Of Ossining,  
and State of New York

(4) Carlos J. Sambucetti  
County of Westchester

Of Croton-on-Hudson  
and State of New York

(5) George F. Walker  
County of Westchester

Of New York,  
And State of New York

have invented certain improvements in

TITLE: METHOD FOR TESTING CHIPS ON FLAT SOLDER BUMPS

and executed, respectively, a United states patent application therefor on

DATES THAT	(1)	April 12, 1999	(2)	April 12, 1999	(3)	April 5, 1999
INVENTORS SIGNED	(4)	April 5, 1999	(5)	April 5, 1999	(6)	
THE DECLARATION						

WHEREAS, INTERNATIONAL BUSINESS MACHINES CORPORATION, A Corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM) desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

NOW, THEREFORE, for valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed  
CITY (1) at Yorktown Heights  
DATE on 3/22/99  
4/12/99  
Madhav Datta  
First Name Middle Initial Last Name  
(Signature)  
(Inventor)

Signed and sealed  
CITY (2) at Yorktown Heights  
DATE on 3/22/99  
4/12/99  
Peter A. Gruber  
First Name Middle Initial Last Name  
(Signature)  
(Inventor)

Signed and sealed  
CITY (3) at Yorktown Heights  
DATE on 4/5/99  
Judith M. Rubino-Roldan  
First Name Middle Initial Last Name  
(Signature)  
(Inventor)

Signed and sealed  
CITY (4) at Yorktown Heights  
DATE on April 5, 99  
Carlos J. Sambucetti  
First Name Middle Initial Last Name  
(Signature)  
(Inventor)

Signed and sealed  
CITY (5) at Yorktown Heights  
DATE on April 5, 1999  
George F. Walker  
First Name Middle Initial Last Name  
(Signature)  
(Inventor)

Inventor  
(1)

On this 12<sup>th</sup> day of April, 1999, before me personally came Madhav Datta, to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

Michelle Parra

(Notary) MICHELLE PARRA  
Notary Public, State of New York  
No. 01PA5089349

Inventor  
(2)

On this 12<sup>th</sup> day of April, 1999, before me personally came Anthony A. Gruber, to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

MICHELLE PARRA  
Notary Public, State of New York  
No. 01PA5089349

Qualified in Dutchess County  
Commission Expires December 8, 1999

Michelle Parra

(Notary)

Inventor  
(3)

On this 5<sup>th</sup> day of April, 1999, before me personally came Judith M. Roldan, to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and she acknowledged to me that she executed the same as her free act and deed.

Michelle Parra

(Notary) MICHELLE PARRA  
Notary Public, State of New York  
No. 01PA5089349

Inventor  
(4)

On this 5<sup>th</sup> day of April, 1999, before me personally came Carlos J. Sambucetti, to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

Michelle Parra

(Notary) MICHELLE PARRA  
Notary Public, State of New York  
No. 01PA5089349

Inventor  
(5)

On this 5<sup>th</sup> day of April, 1999, before me personally came George F. Walker, to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

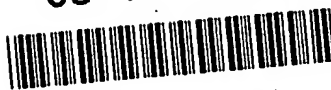
Michelle Parra

(Notary)  
MICHELLE PARRA  
Notary Public, State of New York  
No. 01PA5089349  
Qualified in Dutchess County  
Commission Expires December 8, 1999

PTO-1595

RECORD

08-11-1999

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

101114045

To the Honorable Commissioner of Patents and T.

101114045 the attached original documents or copy thereof.

## 1 Name of conveying party(ies):

Madhev Datta, Peter A. Gruber,  
Judith M. Rubino, Carlos J. Sambucetti  
and George F. Walker

## 2 Name and address of receiving party(ies):

International Business Machines  
Corporation  
Armonk, New York 10504

## 3 Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other:

Execution Date: March 22, 1999/April 5, 1999

Additional name(s) & address(es) attached ☐ Yes ☒ No

## 4 Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: April 5, 1999

A. Patent Application No(s).

B. Patent No(s)

Additional numbers attached? ☐ Yes ☒ No

## 5 Name and address of party to whom correspondence concerning document should be mailed:

RANDY W. TUNG  
Tung & Associates  
838 W. Long Lake Road  
Suite 120  
Bloomfield Hills, Michigan 48302

## 6 Total number of applications and patents involved:

1

## 7 Total fee (37 CFR 3.41)

\$40.00

☒ Enclosed☐ Authorized to be charged to deposit account

## 8 Deposit Account Number:

50-0484

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## 9 Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

RandyW. Tung

Name of Person Signing  
Registration No. 31,311

Signature

Date

8-3-99

Total number of pages including cover sheet, attachments, and document: 4

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

PTO-1595

RECC

05-13-1999

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

101034732

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1 Name of conveying party(ies):  
MADHEV DATTA, PETER A. GRUBER, JUDITH M.  
RUBINO, CARLOS J. SAMBUCETTI AND GEORGE F.  
WALKER2 Name and address of receiving party(ies):  
International Business Machines Corporation  
Armonk, New York 10504Execution Date: March 22, 1999 and April 5, 1999Additional name(s) & address(es) attached ☐ Yes ☒ No

4 Application number(s) or patent number(s):

09301889

If this document is being filed together with a new application, the execution date of the application is: April 5, 1999

A. Patent Application No(s).

B. Patent No(s)

mrd

4-29-99

Additional numbers attached? ☐ Yes ☒ No

5 Name and address of party to whom correspondence concerning document should be mailed:

RANDY W. TUNG  
Tung & Associates  
838 W. Long Lake Road  
Suite 120  
Bloomfield Hills, Michigan 48302

3 Total number of applications and patents involved.

1

7 Total fee (37 CFR 3.41)

\$40.00

☒ Enclosed☐ Authorized to be charged to deposit account

8 Deposit Account Number:

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9 Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Randy W. Tung  
Name of Person Signing  
Registration No. 31,311

Signature

04-29-99  
DateTotal number of pages including cover sheet, attachments, and document: 3Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

J-525 U.S. 09/30/88 04/29/99